

## **Remediation of PCB-Contaminated Sediment in the Duwamish River, Washington**

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Sediment remediation at a King County CSO site in the Duwamish River was the first project undertaken by the Elliott Bay/Duwamish Restoration Program. Remediation of PCB-contaminated sediment was accomplished through mechanical dredging and backfilling with clean sand. Samples collected during dredging showed that PCB contamination was more widespread and severe than originally indicated, resulting in the removal of more sediment than anticipated. Site-wide dredging was completed to a depth of 0.9 meter with two PCB “hot-spot” areas dredged an additional 1.8 meters. Sediment remaining in the hot-spot areas contained PCBs at concentrations exceeding Washington State sediment quality criteria, thus designating the backfill material as a “thick capping layer.” Post-remediation monitoring at the site indicates that the backfill material has not been negatively impacted by operation of the CSO. A storm drain channel that runs through the backfill material, however, has become recontaminated with PCBs. Additional sampling showed that the likely source of recontamination was sediment located inshore of the remediation area, around the storm drain outfall. The inshore area was remediated by The Boeing Company and King County continued to monitor sediment quality on the backfill material until 2004.